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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/522,383

01/26/2005

Masaaki Nemoto

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EXAMINER

LY, NGHI H

ART UNIT

PAPER NUMBER

2617

DATE MAILED: 07/26/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 10/522,383	Applicant(s) NEMOTO, MASA AKI	
	Examiner Nghi H. Ly	Art Unit 2617	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 10 May 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 13-24 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 13-24 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|--|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input checked="" type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

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The Art Unit location of your application in the USPTO has changed. To aid in correlating any papers for this application, all further correspondence regarding this application should be directed to Art Unit 2617.

DETAILED ACTION

Response to Arguments

1. Applicant's arguments with respect to claims 13-24 have been considered but are moot in view of the new ground(s) of rejection.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 13-24 are rejected under 35 U.S.C. 103(a) as being unpatentable over the Applicant's admitted prior art in view of Yoshitaka (JP2001-036937) and further in view of Reddy et al (US 6,243,590).

Regarding claims 13, 16, 19 and 22-24, the Applicant's admitted prior art teaches a mobile station employing an MT-TA Interface description defined by ARIB (Association of Radio Industries and Businesses) TR-T12-27.A02 (see Applicant's Background Art, pages 1-3).

The Applicant's admitted prior art does not specifically disclose the mobile station comprising: a plurality of MTFs (Mobile Termination Function), and a TAF (Terminal Adaptation Function) which is an adaptor portion between a TE (Terminal Equipment) having an HMI (Human Machine Interface) and each of the plurality of MTFs, wherein each of the plurality of MTFs is a wireless channel control part employing a different wireless communications method,

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one of the plurality of MTFS, when receiving a handover request from a corresponding network, transmits to another of the plurality of MTFS and to the TAF notifications that a handover procedure to the another of the plurality of MTFS is started, the another of the plurality of MTFS, upon receiving the handover procedure start notification, communicates with another corresponding network to complete a handover procedure on a wireless channel, and transmits to the TAF a notification that the handover procedure on the wireless channel is completed, the TAF, and upon receiving the notification that the handover procedure on the wireless channel is completed, switches to a communication with the another of the plurality of MTFS.

Yoshitaka teaches the mobile station comprising: a plurality of MTFs (Mobile Termination Function) (see Drawing 1, boxes 15 and 20), and a TAF (Terminal Adaptation Function) which is an adaptor portion between a TE (Terminal Equipment) having an HMI (Human Machine Interface) (see Drawing 1, key input 33 and LCD 34) and each of the plurality of MTFs (see Drawing 1, boxes 15 and 20), wherein each of the plurality of MTFS is a wireless channel control part employing a different wireless communications method (see Drawing 1, boxes 15 and 20 and antenna 10, and see drawing 3, wireless connection between devices), one of the plurality of MTFs (see Drawing 1, boxes 15 and 20 and antenna 10), when receiving a handover request from a corresponding network (see Solution), transmits to another of the plurality of MTFS and to the TAF notifications that a handover procedure to the another of the plurality of MTFS is started, the another of the plurality of MTFS, upon receiving the handover procedure start notification (see Solution), communicates with another corresponding network to complete a handover procedure on a wireless channel (see Solution and Claims), and transmits to the TAF a notification that the handover procedure on the wireless channel is completed, the TAF (see Solution and Detailed Description), and upon receiving the notification that the

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handover procedure on the wireless channel is completed, switches to a communication with the another of the plurality of MTFS (Solution, see "switching").

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to provide the teaching of Yoshitaka into the system of the Applicant's admitted prior art to continue speech by operating handover in the other system when handover fails in one system (Problem To Be Solved).

The combination of the Applicant's admitted prior art and Yoshitaka does not specifically disclose upon receiving the handover procedure start notification, pauses a communication with the one of the plurality of MTFS.

Reddy teaches upon receiving the handover procedure start notification, pauses a communication with the one of the plurality of MTFS (see column 4, lines 35-51, see "stop" and "hard handoff". In this case, the words "hard handoff" mean "break before connect", "break before make" or "connection is removed before a new connection is established" and they read on Applicant's "pauses").

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to provide the teaching of Reddy into the system of the Applicant's admitted prior art and Yoshitaka in order to maintain the connection.

Regarding claims 14, 17 and 20, the combination of the Applicant's admitted prior art, Yoshitaka and Reddy further teaches the handover request includes information regarding a communication parameter between the TAF and the another network which is a destination, the communication parameter includes at least either information regarding a kind of a voice CODEC in the TAF, or information regarding a communication speed between the TAF and the another network which is the destination (see Yoshitaka, Solution and Drawing 3, Yoshitaka teaches mobile communication terminal, the teaching of Yoshitaka inherently teaches

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Applicant's "a communication speed between the TAF and the another network"), the one of the plurality of MTFS further transmits the information regarding the communication parameter to the TAF (see Yoshitaka, Solution), the TAF, after changing a setting regarding a communication based on the information regarding the communication parameter, switches to a communication with the another of the plurality of MTFS (see Yoshitaka, Solution, see "switching" and see Solution and Detailed Description).

Regarding claims 15, 18 and 21, the Applicant's admitted prior art, Yoshitaka and Reddy further teaches the handover procedure on the wireless channel does not complete and fails (see Yoshitaka, Solution), the another of the plurality of MTFS transmits a handover procedure failure notification to the one of the plurality of MTFS (see Yoshitaka, Solution and Detailed Description), the one of the plurality of MTFS, upon receiving the handover procedure failure notification (see Yoshitaka, Solution), communicates with the corresponding network to execute a reverting procedure, the TAF, upon receiving the handover procedure failure notification from the one of the plurality of MTFS, resumes a communication with the one of the plurality of MTFS (see Yoshitaka, Solution, see "switching" and see Solution and Detailed Description).

Conclusion

4. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Nghi H. Ly whose telephone number is (571) 272-7911. The examiner can normally be reached on 8:30 am-5:30 pm Monday-Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nick Corsaro can be reached on (571) 272-7876. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Nghi H. Ly



CHARLES APPIAH
PRIMARY EXAMINER